

Applicants : Nigel Paul Maynard *et al.*
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Attorney Docket No.: 65501-003US1
Client Ref. No.: SHR 504620USPR

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims:

1. (Currently Amended) A method of conditioning a lignocellulosic substrate, the method including the steps of:
 - a) subjecting the substrate to radio frequency (RF) energy in a constrained environment for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature of or above the boiling point of water at ambient pressure; and
 - b) reducing pressure in the constrained environment in a manner causing the moisture within the substrate to boil or evaporate.
2. (Currently Amended) A method as claimed in claim 1 wherein the RF energy is at a frequency between about substantially 10 and substantially 100 MHz.
3. (Currently Amended) A method as claimed in claim 2 wherein the RF energy is at a frequency between about substantially 27 and substantially 40 MHz.
4. (Previously Presented) A method as claimed in claim 1 wherein the pressure in the constrained environment is above atmospheric.
5. (Currently Amended) A method as claimed in claim 4 wherein the pressure is between approximately substantially 0.5 psi and substantially 40 psi above atmospheric.
6. (Currently Amended) A method as claimed in claim 5 wherein the pressure is between approximately substantially 3 psi and substantially 30 psi above atmospheric.

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7. (Currently Amended) A method as claimed in claim 6 wherein the pressure is between approximately substantially 6 psi and substantially 25 psi above atmospheric.

8. (Previously Presented) A method as claimed in claim 1 wherein the pressure in the constrained environment is at atmospheric pressure.

9. (Currently Amended) A method as claimed in claim 1 wherein the temperature achieved within the substrate is between substantially 100 and substantially 130°C.

10. (Previously Presented) A method as claimed in claim 1 wherein the pressure in the constrained environment is reduced by venting.

11. (Currently Amended) A method as claimed in claim 1 wherein the pressure is reduced in step b) by applying or producing a vacuum.

12. (Currently Amended) A method as claimed in claim 1 wherein the pressure is reduced in step b) by a combination of venting and applying or producing a vacuum.

13. (Cancelled)

14. (Currently Amended) A method as claimed in claim 1 [[13]] wherein the lignocellulosic substrate is wood.

15. (Currently Amended) A method as claimed in claim 14 [[13]] wherein the wood lignocellulosic material has a moisture content of more than substantially 60% based on dry weight of the wood material.

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16. (Currently Amended) A method as claimed in claim 15 wherein the moisture content is greater than substantially 100% based on dry weight of the wood material.

17. (Currently Amended) A method as claimed in claim 14 [[15]] wherein the material wood has a moisture content of less than substantially 30% based on dry weight of the wood material.

18. (Previously Presented) A method as claimed in claim 1 wherein the method further comprises the step of storing the substrate to allow the temperature and moisture in the substrate to equilibrate.

19. (Currently Amended) A method as claimed in claim 1 wherein the lignocellulosic substrate is concurrently or subsequently impregnated with a composition.

20. (Original) A method as claimed in claim 19 wherein the composition is an aqueous solution that contains polar and/or non polar solvents, pesticidal or preservative components, and/or polymeric or pre-polymeric components.

21. (Previously Presented) A method as claimed in claim 19 wherein the composition contains a volatile pesticidal or preservative component, and/or pre-polymeric component.

22. (Currently Amended) A conditioning method comprising at least the steps of:

- a) subjecting [[the]] a lignocellulosic substrate to radio frequency (RF) [[RF]] energy in a constrained environment at substantially ambient pressure for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature below the boiling point of water at ambient pressure; and
- b) rapidly reducing pressure in the constrained environment by abruptly applying or producing a vacuum in a manner causing the moisture within the substrate to boil or evaporate.

23. (Currently Amended) A conditioning method comprising at least the steps of:

- a) subjecting [[the]] a lignocellulosic substrate to radio frequency (RF) [[RF]] energy in a constrained environment for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature of or above the boiling point of water at ambient pressure;
- b) incorporating into the void surrounding the substrate in the constrained environment, a composition which may impart sterilisation, preservative, or property modifying aspects; and
- c) reducing pressure in the constrained environment to allow the moisture within the substrate to boil and/or evaporate.

24. (Currently Amended) A lignocellulosic substrate that has been conditioned according to a method of claim 1.

25. (Currently Amended) A substrate as claimed in claim 24 wherein the lignocellulosic substrate is a lignocellulosic material or wood.

26. (Cancelled)

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27. (Currently Amended) A lignocellulosic substrate that has been conditioned according to a method of claim 22

28. (Currently Amended) A lignocellulosic substrate that has been conditioned according to a method of claim 23

29. (Currently Amended) A lignocellulosic substrate as claimed in claim 27 wherein the substrate is ~~a lignocellulosic material or wood.~~

30. (Currently Amended) A lignocellulosic substrate as claimed in claim 28 wherein the substrate is ~~a lignocellulosic material or wood.~~